



## SEQUENCE LISTING

<110> Promega Corporation  
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Almond, Brian  
Wood, Monika G.

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<141> 2003-09-16

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<213> Artificial Sequence		

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<220>
<223> A synthetic primer

<400> 62
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<210> 63
<211> 59
<212> DNA
<213> Artificial Sequence

<220>
<223> A synthetic primer

<400> 63
ggccgcctac aagtggatca cgaagtggct caagctgctg aaccagttct tgcaggcag      59

<210> 64
<211> 62
<212> DNA
<213> Artificial Sequence

<220>
<223> A synthetic primer

<400> 64
gatcttatgt ctgcctgcaa gaactggttc agcagcttga gccacttcgt gatccacttg      60
ca                                         62

<210> 65
<211> 62
<212> DNA
<213> Artificial Sequence

<220>
<223> A synthetic primer

<400> 65
agcttgcaag tggatcacga agtggctcaa gctgctgaac cagttcttgc aggtagacat      60
aa                                         62

<210> 66
<211> 1653
<212> DNA
<213> Artificial Sequence

<220>
<223> A synthetic optimized firefly luciferase sequence

<400> 66
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gccttcaccc atgcccacat tgaggtggac atcacctatg ccgagttactt cgagatgtct      180
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tgctctgaga actctctgca gttcttcatg ccagtgtgg ggcgcctgtt catcggtgt      300
gccgtggccc ctgctaacga catttacaac gagcgcgagc tgctgaacacat catggccatt      360
tctcagccata ccgtgggtt cgtgtctaa aaggccctgc agaagatctt gaacgtgcag      420
aagaagctgc ctatcatcca gaagatcatc atcatggact ctaagaccga ctaccaggc      480
ttccagagca tgtacacatt cgtgacatct catctgcctc ctggcttcaa cgagttacgac      540
ttcggtccag agtcttcga cagggacaaa accattggcc tgatcatgaa cagctctggg      600
tctaccggcc tgcctaaggc cgtggccctg ccccatcgca cccgcctgtgt ggccttctct      660

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cgggtggtc	tgatgtaccg	cttcgaggag	gagctgttcc	tgccgcagcct	gcaagactac	840
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gaggtgccc	aggccctgac	cggcaagctg	gacgcccgc	agatccgcga	gatcctgatc	1620
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<210> 67

<400> 67  
000

<210> 68

<211> 684

<212> DNA

<213> Artificial Sequence

<220>

<223> A synthetic optimized GFP sequence

<400> 68

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gacctgaccg	tgatcgaggg	cggccccc	cccttcgctt	atgacattct	caccaccgt	180
ttcgactacg	gtAACCGTGT	cttcgc	taccccaagg	acatccctga	ctacttcaag	240
cagacccctcc	ccgagggct	ctcgtggag	cgaagcatga	catacgagga	ccagggaa	300
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atccgcttcg	acggggtaa	cttcctgtct	aatggcccgg	tgatgcgcg	caagacccta	420
aagtgggagc	ccagtaccga	gaagatgtac	gtgcggacg	gcgtactgaa	ggcgatgtt	480
aatatggcac	tgctcttgg	gggaggcggc	cactaccgt	gcgacttcaa	gaccacctac	540
aaagccaa	aggtggtgca	gcttccc	taccacttcg	tggaccac	catcgagatc	600
gtgagccacg	acaaggacta	caacaaagtc	aagctgtacg	agcacgc	agccacac	660
ggactacccc	gccaggccgg	ctaa				684

<210> 69

<211> 1776

<212> DNA

<213> Artificial Sequence

<220>

<223> A synthetic optimized firefly luciferase

<400> 69

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gccttcaccg	atgcccacat	tgaggtggac	atcacat	ccgagat	cgagatgtct	180
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atcgacaagt	acgacctgtc	taacctgcac	gagattgcct	ctggc当地	cccactgtct	960
aaggaggtgg	gc当地	ggccaaagcgc	tttcatctgc	caggcatccg	ccaggc当地	1020
ggc当地	agacaaccag	c当地	attacccag	agggc当地	caaggc当地	1080
gccgtggca	aggtgggtgc	attcttc当地	gcca当地	tggacctgga	caccggcaag	1140
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caccctaaca	tttgc当地	c当地	ggc当地	ac当地	c当地	1440
cctgccc当地	tc当地	gga当地	aa当地	c当地	c当地	1500
tatgtggca	gccagggtac	aaccgc当地	aagctgc当地	gc当地	gt当地	1560
gaggtgccc	aggc当地	c当地	gacgc当地	agatccgc当地	gatc当地	1620
aaggctaaga	aaggc当地	gatc当地	aattctc当地	gcttcc当地	cgagggtggag	1680
gagcaggccg	ccggc当地	gccc当地	tgc当地	aggc当地	ggatagacac	1740
cctgctgctt	gccc当地	c当地	gtctaa			1776

<210> 70  
<211> 1829  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> A synthetic optimized firefly luciferase

<400> 70						
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tctc当地	ccgtgggtt	cgtgtctaa	aaggc当地	agaagatct	gaacgtgc当地	420
aaggactgc	ctatcatcca	gaagatcatc	atcatggact	ctaagaccga	ctaccaggc	480
ttccagagca	tgtacacatt	c当地	catctgc当地	ctggcttcaa	cgagatcgac	540
ttc当地	agtcttc当地	c当地	accattgccc	tgatcatgaa	cagctctggg	600
tctaccggcc	tgc当地	ggc当地	c当地	acgc当地	gccc当地	660
cacgcccccg	accctattt	c当地	atcatccccg	acaccgctat	tctgagcgtg	720
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tacgtgaata	accctgaggc	c当地	ctgatcgaca	aggacggctg	gctgactct	1260
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ctgatcaagt	acaaggc当地	ccagggtggc	ccaggc当地	t当地	c当地	1380
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tatgtggca	gccagggtac	aaccgc当地	aagctgc当地	gc当地	gt当地	1560
gaggtgccc	aggc当地	c当地	gacgc当地	agatccgc当地	gatc当地	1620
aaggctaaga	aaggc当地	gatc当地	aattctc当地	gcaagaactg	gttca	1680

ttaagccact ttgtgatcca ccttaacagc cacggcttcc ctccc gaggt ggaggagcag	1740
gccgcggca ccctccccat gagctgcgcc caggagagcg gcatggatag acaccctgct	1800
gcttgcgcca gcgccaggat caacgtcta	1829

<210> 71  
<211> 1776  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> A synthetic optimized firefly luciferase

<400> 71	
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<210> 72  
<211> 1830  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> A synthetic optimized firefly luciferase

<400> 72	
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<210> 73  
<211> 1059  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> A synthetic optimized Renilla luciferase

<400> 73

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caccctgctg	cttgc当地	cgccaggatc	aacgtctaa			1059

<210> 74  
<211> 1113  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> A synthetic optimized Renilla luciferase

<400> 74

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aagcacgccc	agaacgccgt	gattttctg	catggtaacg	ctgcctccag	ctacctgtgg	180
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agcttaagcc	actttgtat	ccaccttaac	agccacggct	tccctcccg	ggtggaggag	1020
caggccgccc	gcaccctgcc	catgagctgc	gcccaggaga	gcggcatgga	tagacaccct	1080
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<210> 75

<211> 1140

<212> DNA

<213> Artificial Sequence

<220>

<223> A synthetic optimized Renilla luciferase

<400> 75

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gcctacctgg	agccattcaa	ggagaagggc	gaggtagac	ggcctaccct	ctcctggcct	660
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caggccgccc	gcaccctgcc	catgagctgc	gcccaggaga	gcggcatgga	tagacaccct	1080
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<210> 76

<211> 1857

<212> DNA

<213> Artificial Sequence

<220>

<223> A synthetic optimized firefly luciferase

<400> 76

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gccttcaccg	atgcccacat	tgaggtggac	atcacatcg	ccgagatctt	cgagatgtct	180

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tctcagccta	ccgtgggtt	cgtgtctaag	aaggccctgc	agaagatct	gaacgtgcag	420
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cacgcccccg	accctatTTT	cggcaaccag	atcatccccg	acaccgctat	tctgagcgtg	720
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gccgc当地	ccctgc当地	gagctgc当地	caggagagcg	gcatggatag	acaccctgct	1800
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<210> 77

<211> 1752

<212> DNA

<213> Artificial Sequence

<220>

<223> A synthetic optimized click beetle sequence

<400> 77

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atcaacgtct	aa					1752

<210> 78  
<211> 1833  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> A synthetic optimized click beetle sequence

<400>	78					
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gctgaaaaca	atacccttt	cttcattcca	gtcatcgccg	catggatatat	cggtatgtac	300
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tgcccccagg	agagcggcat	ggatagacac	cctgctgctt	gcccagcgc	caggatcaac	1800
gtctagggcgc	cggactttat	ttatttattt	ctt			1833

<210> 79  
<211> 1752  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> A synthetic optimized click beetle sequence

<400>	79					
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<210> 80  
<211> 1833  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> A synthetic optimized click beetle sequence

<400> 80						
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aacagccacg gctccctcc cgaggtggag gagcaggccg ccggcaccct gcccattgagc 1740  
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<210> 81  
<211> 39  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> A synthetic mutant ODC peptide

<220>  
<221> SITE  
<222> (1)...(39)  
<223> Xaa = any amino acid wherein one or more of the  
Xaa residues are not the naturally occurring  
residue

<400> 81  
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Met Ser Cys Ala Gln Glu Ser Gly Xaa Xaa Arg His Pro Ala Ala Cys  
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Ala Ser Ala Arg Ile Asn Val  
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<210> 82  
<211> 13  
<212> PRT  
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<220>  
<223> A synthetic peptide

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<210> 83  
<211> 24  
<212> PRT  
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<220>  
<223> A synthetic peptide

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<212> PRT  
<213> Artificial Sequence

<220>  
<223> A synthetic peptide

<400> 84  
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Lys Ile Ala Val  
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<210> 85  
<211> 24  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> A synthetic peptide

<400> 85  
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<210> 86  
<211> 20  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> A synthetic peptide

<400> 86  
Met Gln Ile Phe Gly Gly Glu Val Thr Asp Ala Lys Asn Ile Lys Lys  
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Lys Ile Ala Val  
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<210> 87  
<211> 24  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> A synthetic peptide

<400> 87  
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Asn Ile Lys Lys Lys Ile Ala Val  
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<210> 88  
<211> 23  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> A synthetic peptide

<400> 88  
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Ile Lys Lys Lys Ile Ala Val

20